Executive Summary

Introduction

Shaping Health as Partners in Education (SHAPE) California is a statewide effort of the Nutrition Education and Training (NET) Program of the California Department of Education. SHAPE California is a comprehensive approach to nutrition services that includes offering healthy meals in child nutrition programs; promoting comprehensive, sequential nutrition education; developing and applying school nutrition policies and practices; and building and maintaining partnerships that promote health and nutrition in schools and communities. There are currently 93 SHAPE California school districts in over 30 counties that are committed to making a difference for students by implementing this comprehensive approach.

Health & Education Communication Consultants (HECC), Berkeley, was awarded a contract to conduct the evaluation. The first component of this evaluation was a needs assessment of SHAPE California districts. Two subcontractors participated in the needs assessment. Juarez and Associates, Los Angeles, conducted the focus groups, and Samuels and Associates, Oakland, consulted on the needs assessment findings and recommendations.

Purpose of the Needs Assessment

The needs assessment was conducted in the spring of 1998 to identify what schools need in order to provide effective, sequential, culturally relevant nutrition education. The assessment's three-pronged data collection design included a review of the nutrition education literature; focus groups with school administrators, teachers, child nutrition directors, cafeteria staff, and parents; and a mail survey of the child nutrition and classroom partners in the 93 SHAPE California school districts.

The needs assessment investigated aspects of SHAPE California that are also being explored in other components of the three-year evaluation. These aspects are:

- Recognition of the link between nutrition and academic success
- The value placed on nutrition education
- Nutrition education in the classroom
- Nutrition education in the cafeteria
- The partnership between child nutrition and classroom
- Nutrition-related policies
- Staff development

Needs Assessment Methodology

Literature Review

Three major reviews of the nutrition education research literature undertaken in the mid-1990s were the principal sources for HECC's review. These were *Nutrition Education for School-Aged Children: A Review of Research* (Lytle 1994), a review of 17 articles from peer-reviewed journals; *Changing the Diet of America's Children: What Works and Why?* (Lytle and Achterberg 1995), a review of nutrition intervention programs that included an outcome evaluation; and a special issue of the *Journal of Nutrition Education* (December 1995), with particular emphasis on Isobel Contento's chapter, "Nutrition Education for School-Aged Children." *Guidelines for School Health Programs to Promote Lifelong Healthy Eating* from the Centers for Disease Control and Prevention (June 14, 1996) provided additional perspective to the literature review.

Survey of Child Nutrition and Classroom Partners

School districts that participate in SHAPE California designate two individuals to provide leadership and coordination of all SHAPE activities. These individuals represent the child nutrition and classroom aspects of SHAPE and are called "Partners." The child nutrition partner is usually the director of child nutrition or food services, and the classroom partner is usually a teacher, nurse, or administrator.

In May 1998, a mail survey of the child nutrition and classroom partners at the 93 school districts participating in SHAPE California was undertaken. Eighty-two child nutrition partners (89%) and 50 classroom partners (59.5%) responded.

Child nutrition and classroom versions of the survey were created. Some questions were common to both survey instruments, while others were unique to the responsibilities and perspectives of each partner. Although most items were closed, requiring respondents to choose from among several responses, others were open-ended. The surveys were analyzed using the Statistical Package for the Social Sciences (SPSS).

Focus Groups

Thirteen focus group sessions were held with persons in SHAPE California districts who were associated with or knowledgeable about school nutrition education. There were two homogeneous group types—administrators and teachers—and one mixed group type consisting of child nutrition staff, parents, and/or nurses. Two of the 13 groups pilot-tested the survey instruments.

Teacher group sessions were held in Irvine Unified School District (Orange County, Region 9B), Elk Grove Unified School District (Sacramento County, Region 3), and Pixley Union School District (Tulare County, Region 7). Vacaville Unified School District (Solano County, Region 4) was one pilot-test site. Administrator groups were held in Hawthorne Elementary School District (Los Angeles County, Region 11), Santa Cruz City Elementary School District (Santa

Cruz County, Region 5), Center Unified School District (Sacramento County, Region 3), and Jefferson Union High School District (San Mateo County, Region 4). Mixed groups met in Compton Unified School District (Los Angeles County, Region 11), Lagunitas Elementary School District (Marin County, Region 4), El Dorado Union High School District (El Dorado County, Region 3), and Burton Elementary School District (Tulare County, Region 7). New Haven Unified School District (Alameda County, Region 4) was the second pilot-test group.

Key Findings

The key findings from a synthesis of the literature review, the survey of child nutrition and classroom partners, and the focus groups are grouped by the six aspects of nutrition education that the evaluation is exploring.

The Link Between Nutrition and Learning

The focus groups and survey indicate that most educators know that nutrition impacts learning but that little attention is paid to this relationship. The three needs assessment data sources indicate that the school community generally knows that good nutrition is important. Young people know that there is a connection between their food choices and their health, but this knowledge does not influence their eating habits.

The Value Placed on Nutrition Education

Data from the focus groups show that nutrition education is a low priority for educators. Administrators perceive a lack of emphasis on nutrition from the parents, the community, and the state, and teachers perceive academics as the main priority for both parents and educators. Focus group and survey responses indicate that highlighting the relationship between nutrition and behavior—particularly academic success—to educational decision-makers (including the Legislature), parents, and the community would be the most important way to make nutrition education a higher priority.

Nutrition Education in the Classroom and Cafeteria

The literature review indicates that effective nutrition education should target specific behavioral changes and utilize developmentally appropriate strategies. Nutrition education needs to incorporate social support—parental involvement for elementary children, and peer involvement for middle and high school students. Children of all ages will benefit from a community environment that reinforces the nutrition messages taught at school. Survey respondents and focus group participants felt that nutrition education may be successfully implemented as a distinct unit within another subject or via integration into the core curriculum. Both the classroom and the cafeteria are regarded as appropriate locations for nutrition education.

Partnership Between Classroom and Child Nutrition

Among survey respondents and focus group participants, universal support exists for a strong relationship between the classroom and child nutrition staff, but there are many barriers. The greatest barriers include time to meet and work together and a lack of understanding of each other's job responsibilities, skills, and expertise.

Nutrition-Related Policy

The literature review shows that school nutrition policy is an important element of comprehensive nutrition education. School policies should be designed to reinforce nutrition messages taught in the classroom and cafeteria. However, to date, SHAPE California partners have not joined forces to address the policy element of nutrition education.

Staff Development and Support Needs

Educators in the focus groups and survey agree that teachers need training to become competent nutrition educators and to feel comfortable in that role. Teachers would be more likely to teach nutrition if they had access to appropriate and easy-to-use materials and additional financial resources.

Recommendations

Ten recommendations for school districts and for the California Department of Education are drawn from the needs assessment findings.

- Strong support exists from educators for emphasizing the link between nutrition and academic performance. The California Department of Education should take the lead in communicating this link to the Legislature, educators, school board members, parents, and community residents through multiple communication channels.
- Nutrition education programs must preserve the following key elements: sufficient exposure; a focus on building skills; scope and sequence of curriculum; developmental appropriateness; and adequate teacher preparation.
- Integration of nutrition education into the core curriculum should be field-tested and should not sacrifice the key elements of successful nutrition education programs.
- Nutrition education must take place in both the classroom and the cafeteria, and planning and implementation of activities and lessons should occur in partnership.
- Resources and administrative support must be devoted to building effective partnerships between the classroom and the cafeteria, including time for meetings and other modes of communication; official time for cafeteria staff to be at the school site; and staff development for classroom and child nutrition representatives to promote understanding on each side about the roles and responsibilities of the other.

- The school environment needs to reflect and support nutrition education objectives.
- In order for nutrition education to be implemented in the classroom, the California Department of Education should provide materials (cooking supplies, lesson plans that integrate nutrition into core subjects, stand-alone nutrition lessons, multimedia products, commercial nutrition activities) and training in general nutrition and how to integrate nutrition into core subjects.
- To implement nutrition education in the cafeteria, the California Department of Education should provide grants (for staff, training, and materials); training (in "selling" nutrition to instructional staff); and materials.
- Nutrition knowledge should be added to student assessments in order to make nutrition education a higher priority.
- Parents should be given training and information about nutrition in order to support and reinforce school-based nutrition education.

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